

"Hyde Park Remedial Program."

July 1, 1982 - December 1982

• Plume Survey and Pump Tests.

The ~~purpose of the~~ plume survey and pump test ~~was~~ ^{were} to determine the extent of ~~contamination~~ that contamination has spread through the bedrock away from the landfill. The survey essentially began the first week of July 1982 with ~~a few~~ ^{approximately} half of the wells installed by December 1982.

• Bloody Run Risk Evaluation (1982)

The Bloody Run risk evaluation ^{study} of the two remediation options i.e. "Capping versus Excavation" of Bloody Run Creek to determine or select which of the two options poses the smaller risks to the people and the environment was underway (Fall 1982). EPA/state approved OCC's selection of A. D. Brittle Inc to conduct the risk assessment study.

• Bloody Run Creek Fencing at the Discharge Point (Nia. Riv.)

The fence enclosing Bloody Run Creek at the point where the creek empties into the Niagara River was built in Fall 1982 to prevent access to the creek at that location.

Year 1983

MR. JEAN DUBOIS

Hyde Park Remedial Program

January 1, 1983 - December 1983

• Plume Survey and Pump Tests (con'd)

During October 1983, OCC submitted a three-volume report describing the results of the "Plume Survey". A total of 68 wells were installed. There were 13 wells in the overburden, 50 wells in the bedrock and 5 wells into the landfill itself.

During November 1983, a number of wells equipped with pumps were tested near the landfill to determine the effects that pumping would have on the bedrock aquifer system. This pump testing was completed by the end of November 1983.

• Addition of Tracers to Lagoons.

The lagoon tracer program required that tracer be added to the non-aqueous phase liquids (NAPL) stored in the lagoons. Wells (installed) surrounding the lagoons will then monitor for the presence of these tracers to determine if the lagoons are leaking. The installation of these wells (3 wells) was completed December 6, 1983.

• Temporary Leachate Storage (1983)

A temporary leachate storage consisting of four 10,000 gallon tanks (total 40,000 gallons) was scheduled for construction at the site approximately 1000 feet east of the existing lagoons pending "permit approval from the Town of Niagara."

Year 1983 (con'd).

MR. JEAN DUBOIS, P.F. (3)

- Soil Survey and Perimeter Cap.

During August, September and October 1983, soil (samples) was collected from the area surrounding the landfill to determine how far contamination from the landfill has spread into the soil and to determine the extent of the area to be capped.

- Past Particulate Migration.

New York State Dept of Health (NYSDOH) conducted dust samples and soil samples from attics and yards on selected properties in the Hyde Park landfill surrounding area to determine if wind-blown transport of chemically contaminated particulate matter occurred from the landfill from 1953 to 1975. The study was conducted between October 31 to November 16, 1983.

- Bloody Run Risk Evaluation (con'd) (1983)

A remediation option is yet to be selected. On December 1983, OCC submitted a Bloody Run risk assessment report to EPA/State.

- Leachate Treatment Plant (Buffalo Avenue, OCC ^{Main} Plant)

During August 1983, OCC upgraded its waste water treatment plant used to treat leachate collected at Hyde Park.

Year 1983 (con'd).

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E.

- Health and Safety Plans During Construction.

Part I, General Health and Safety;
Part III, Analysis of Organics on Air Particulates and;
Part IV Off-Site Contingency Plan were submitted to
EPA/State in August 1983. (Part II, V, VI and VII are still
being prepared by OCC (please see 1985)).

- Field Tests of Dust Suppression Techniques Before
Disturbing Contaminated Soil at the landfill.

Field tests to simulate excavation processes similar
to those which will be encountered during actual remedial
construction at the landfill (for effectiveness of dust suppression
techniques) were performed ^{at the site} during October 1983.

Year 1984

MR. JEAN DUBOIS, P.E. ⑤

Hyde Park Remedial Program

January 1st, 1984 - December 1984

• Site Restoration and Maintenance work

The purpose of the site restoration and maintenance work was to seal a seep on the northern face of the landfill to prevent further migration of chemicals to the ground surface thereby reducing the potential for contaminated surface runoff and volatilization of chemicals.

• Wet Weather Sampling - Bedrock Monitoring Wells.

During the period of May - June 1984, Occidental Chemical Corporation conducted the wet weather sampling program of the bedrock monitoring wells (14 wells), as outlined in the Hyde Park Agreement, Addendum II. The dry weather sampling will be conducted during the summer of 1985.

• Well Grouting / Conversion Program

The grouting / conversion program began on August 30, 1984. It (the program) involved the placement of a portland cement grout mixture into a predetermined bedrock interval in order to convert the boreholes (wells) into monitoring wells.

• Wells Closure

Three (3) Hyde Park observation wells were per-

Year 1984

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- Well Closure (con'd)
manently closed following an ~~explosion~~ expansion at Tam Ceramics Inc. The location of these 3 wells was in conflict with the proposed expansion and therefore the wells were closed.

- Sanitary Sewer Lift Station Sampling Program.

The sampling program conducted during the second week of October 1984 was to determine sewer water and sediment quality for the purpose of comparison with that of identified seeps in the adjacent Niagara River Gorge. "The sanitary sewer lift station wet well extends into the upper bedrock regime."

- Bloody Run Risk Evaluation (con'd) (1984)

A remediation option is yet to be selected. On October 1984, OCC submitted a revised risk assessment report to EPA/State.

- Permanent Leachate Storage and Handling Facility.

The facility is designed to receive organics liquids and contaminated groundwater from the subsurface collection system surrounding the Hyde Park landfill. The facility will replace the two existing lagoons. Part B permit for the facility "still" under way.

Year 1984

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- Survey of Gorge Face (Seeps)

New York State and OCC conducted a survey of the gorge face (sampling) on July 25 and 26, 1984. The survey ~~confirmed the~~ results confirmed that Hyde Park Chemicals have migrated to the gorge face area at Niagara Falls, N.Y.

- Fence along New Road (Gorge Face).

In 1984 a fence was installed along New ~~Road~~ Road to prevent public access to the seeps and possible threat of contamination to people walking along the seep area. The fence design considerations, coordinated among EPA/state/OCC and PASNEY (Power Authority of the State of New York), was installed by PASNEY.

- Assessment of Environmental Hazards Due to Contaminated Groundwater Attributable To The Hyde Park landfill

The assessment conducted during the year of 1984 conclude that a remote possibility exists that people in the area or working in the vicinity of the landfill could come in contact with the contaminated groundwater attributable to the landfill only if they have access to the sewers.

Year 1984 (con'd).

MR. JEAN DUBOIS, P.E. (8)

- Requisite Remedial Technology (RRT) (1984)

During April and May 1984, OCC submitted RRT documents to address groundwater contamination due to the landfill. Negotiations ~~are~~ ^{were} on-going to develop a comprehensive RRT throughout the ~~year~~ ^{fall} of 1984 ^{and} to resolve issues raised in the EPA/State's responses to OCC dated September 4, 1984.

- Health and Safety Plans During Construction ⁽¹⁹⁸⁴⁾ (see 1983)

Part I, III and IV were under review by EPA/State during 1984. A few important issues remained unresolved until the end of 1984 (see 1985). The other parts of the Health and safety package were still being prepared by OCC until the end of 1984 (see 1985).

- Contamination at Devil's Hole State Park

During August 1984 a french drain near Devil's Hole was completed. The drain installed to a ~~deep~~ depth of approximately 18 inches was placed to collect contaminated water from seeps observed in the Devil's Hole area.

- Introduction of Tracers into the existing lagoons.

On January 19, 1984, OCC introduced tracers into the existing lagoons at the landfill. Subsequently, perimeter monitoring wells ~~for the tracers~~ were checked for the tracer and it was determined that the lagoons were leaking.

Year 1984

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- Swale Survey

Swale Alpha, Beta, Delta and Gamma were sampled in 1984 in accordance to EPA/state approved specifications and protocols for the Swale Survey as part of Appendix 'C' of the Hyde Park Quality Assurance Plans, February 1983. The results of the survey will also be used to define the areas to be capped.

- Fencing at Bloody Run Creek

~~Fencing~~ A fence enclosing Bloody Run Creek along the University Drive area was installed in October 1984 to prevent access to the creek to areas contaminated by the ponding and overflow conditions which occurred in the Spring 1984 near the point where the creek enters the drainage culvert which carries Bloody Run Creek under University Drive.

Year 1985.

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Hyde Park Remedial Program

January 1985 - - - - to date.

- Incineration of Hyde Park landfill "NAPL"

During March and ~~May~~ July 1985, OCC submitted test burn plan, preliminary and revised documents (July) presenting information related to permit requirements for upgrading its "Residue Reactor at the Main Plant on Buffalo Avenue, Niagara Falls" to incinerate organic liquids collected at Hyde Park.

- Permanent Leachate Storage and Handling Facility.
(con'd)

During July, 1985, OCC submitted plans for an "extra tank" designed to store NAPL at the facility if an emergency requiring additional NAPL storage should arise. The preparation for a part "B" permit for the facility is still underway.

- Bloody Run Risk Evaluation (1985) (con'd).

A remediation option is "yet" to be selected. The October 1984 risk assessment report is still being reviewed by EPA/State. The NYSDOH has the lead for this particular item.

- Requisite Remedial Technology (RRT) (con'd)

Negotiations are still underway to develop a comprehensive RRT to implement at the Hyde Park landfill (and vicinity).

Year 1985

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Health and Safety Plans During Construction

The Health and Safety Plans during Construction are covered under Addendum V of the Hyde Park Agreement. During 1985, it was agreed ~~among~~ ^{between} the Governments (EPA/state) and Occidental that Addendum V "Language" should be modified to reflect S-Area language in specific areas. EPA/state provided draft letters to OCC ~~which~~ in March 1985 which detailed areas in the Hyde Park (~~Addendum V~~) where it may be appropriate to conform the Hyde Park Agreement to the S-Area Agreement. A meeting on Health and Safety plans is being arranged ~~among~~ ^{between} EPA/state, and OCC to discuss these important issues.